101.1 - Plain Carbon Steels (chip form)

These SRMs are for checking chemical methods of analysis. They consist of steel alloys selected to provide a wide range of analytical values for elements. They are furnished in 150-g units (unless otherwise noted) as chips usually sized between 0.4 mm to 1.2 mm, prepared from selected portions of commercial ingots.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

			Element Composition (mass fraction, in %)						
SRM	**Description**	**Unit of Issue**	**C**	**Mn**	**P**	**S**	**Si**	**Ni**	**Cu**
8k	Bessemer Steel (Simulated), 0.1 % Carbon	150 g	0.0806	0.5040	0.0956	0.0775	0.0576	0.1174	0.0200
12h	Basic Open-Hearth Steel, 0.4% Carbon	150 g	0.407	0.842	0.018	0.027	0.235	0.032	0.073
13g	0.6% Carbon Steel	150 g	0.613	0.853	0.006	0.031	0.355	0.061	0.066
14g	Carbon Steel (AISI 1078)	150 g	0.735	0.456	0.006	0.019	0.232	0.030	0.047
15h	Basic Open-Hearth Steel, 0.1% Carbon	150 g	0.076	0.373	0.005	0.019	0.008	0.017	0.013
16f	Basic Open- Hearth Steel, 1% carbon	150 g	0.97	0.404	0.014	0.026	0.214	0.008	0.006
19h	Basic Electric Steel, 0.2% Carbon	150 g	0.215	0.393	0.016	0.022	0.211	0.248	0.466
20g	AISI 1045 Steel	150 g	0.462	0.665	0.012	0.028	0.305	0.034	0.034
152a	Basic Open-Hearth Steel, 0.5% Carbon (Tin Bearing)	150 g	0.486	0.717	0.012	0.030	0.202	0.056	0.023
178	0.4C Basic Oxygen Furnace Steel	150 g	0.395	0.824	0.012	0.014	0.163	0.010	0.032
368	Carbon Steel (AISI 1211)	150 g	0.089	0.82	0.084	0.132	0.007	0.008	0.010

Values in parentheses are not certified and are given for information only.

101.1 - Plain Carbon Steels (chip form)

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			Element Composition (mass fraction, in %)						
SRM	**Description**	**Unit of Issue**	**Cr**	**V**	**Mo**	**Co**	**Sn**	**Al (total)**	**N**
8k	Bessemer Steel (Simulated), 0.1 % Carbon	150 g	0.0467	0.0145	0.0397				
12h	Basic Open-Hearth Steel, 0.4% Carbon	150 g	0.074	0.003	0.006			(0.038)	0.006
13g	0.6% Carbon Steel	150 g	0.050	0.001				0.048	
14g	Carbon Steel (AISI 1078)	150 g	0.081	0.0008	0.011			0.025	
15h	Basic Open-Hearth Steel, 0.1% Carbon	150 g	0.018	>0.001	0.009			0.061	
16f	Basic Open- Hearth Steel, 1% carbon	150 g	0.020	0.002	0.003	0.003			
19h	Basic Electric Steel, 0.2% Carbon	150 g	.0173	0.003	0.038			0.002	
20g	AISI 1045 Steel	150 g	0.036	0.002	0.008			0.040	
152a	Basic Open-Hearth Steel, 0.5% Carbon (Tin Bearing)	150 g	0.046	0.001	0.036		0.032		
178	0.4C Basic Oxygen Furnace Steel	150 g	0.016	0.001	0.003				
368	Carbon Steel (AISI 1211)	150 g	0.030	0.001	0.003				0.010

Values in parentheses are not certified and are given for information only.